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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,321	01/16/2004	Horst Siefermann	4965-0173/CO	9843
27572	7590	05/23/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			RODRIGUEZ, PAMELA	
			ART UNIT	PAPER NUMBER
			3683	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/760,321	Applicant(s) SIEFERMANN ET AL.	
	Examiner Pam Rodriguez	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/16/04&04/23/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "said original sheet bar" in line 3. There is insufficient antecedent basis for this limitation in the claim.

In the last two lines of Claim 9, the phrase "one and the same sheet metal forming process" is indefinite. It is unclear exactly what this limitation connotes. In other words, what one and the same sheet metal forming process is applicant referring to? It appears that applicant is attempting to claim that the second annular flange is formed by the sheet metal forming process used to form the bottom, the pot wall, and the first annular flange but this is not explicitly clear by the use of the "one and the same sheet metal forming process" term.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent DE 19952919 in view of the German book reference cited by applicant in the first listing of the Other Documents of the IDS filed April 23, 2004 and also described on page 2 of his specification.

Regarding Claim 1, the '919 patent discloses a pneumatic spring pot 3 (see Figure 1) having most all the features of the instant invention including: a pot wall 3 having a first diameter (see Figure 1 and the width of the walls 3 of the spring pot readable as the first diameter); a bottom connected to said pot wall (see Figure 1 and the top right angled portions of the pot whose surfaces contact the top of element 12); a

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first annular flange opposite said bottom and connected to said wall (see Figure 1 and the lowermost portion of pot 3 nearest element 10); said first annular flange having a second diameter smaller than said first diameter of said pot wall (see Figure 1, wherein the second diameter is readable as the width of the lowermost flange portions described above), and a second annular flange connected to said bottom (see Figure 1 and the topmost portion of element 3 extending up from the right angled portions of this section nearest element 2) and produced in one piece with said bottom (see Figure 1 which appears to show that the flange piece and the bottom piece are integral with one another and all form part of the spring pot).

However, the '919 patent does not disclose that the bottom, pot wall, and first annular flange are formed in one piece with one another from a sheet metal by sheet metal forming from a sheet bar and in such a way that said annular flange is formed from an outer edge region of said sheet bar.

Regarding the formation of the bottom, pot wall, and first annular flange in one piece with one another from a sheet metal by sheet metal forming from a sheet bar, the German book reference (described on page 2 of applicant's specification) is relied upon as admitted prior art by applicant. In the last paragraph of page 2 of applicant's specification, it is disclosed that the German book reference teaches a spring pot having a bottom, pot wall, and annular flange(s) all being formed in one piece from sheet metal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the bottom, pot wall, and first annular flange of the '919 patent in one piece from a sheet metal by sheet metal forming, such

as from a sheet bar, as taught by the German book reference as a matter of design preference dependent on the manufacturing constraints, amount of material available to fabricate the spring pot, production costs, etc. A sheet metal manufacturing process is more cost effective and permits a high degree of forming capability while providing high strength.

Regarding the annular flange being formed from an outer edge region of the sheet bar, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the annular flange of the '919 patent, as modified, from an outer edge region of the sheet bar as a matter of design preference dependent upon the amount of material available and capable of use in constructing such a flange configuration. As long as the annular flange can be formed from the sheet bar, the location of its formation on the sheet bar is arbitrary.

Regarding Claim 2, the '919 patent, as modified, discloses most all the features of the instant invention as applied above, except for the bottom and the pot wall being formed from the sheet bar by deep drawing.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the bottom and pot wall of the '919 patent, as modified, to be formed from the sheet bar by deep drawing, again, as a matter of design preference dependent upon the manufacturing constraints of the pot, production costs, type of material used, etc. See also U.S. Patent No. 5,060,916 to Koschinat et al which discloses deep drawing of a sheet metal to form a spring pot (column 6 lines 33-35).

Regarding Claim 3, the '919 patent, as modified, does not disclose that the first annular flange is formed by a process chosen from a group comprising rolling, pressing, and indrawing.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the annular flange of the '919 patent, as modified, to be formed by either rolling, pressing, or indrawing, as a matter of design preference. As long as the flange is adequately constructed, the method used to fabricate and shape it is arbitrary.

Regarding Claim 4, the '919 patent, as modified, does not disclose that a ratio of the second diameter of the first annular flange and the first diameter of the pot wall is smaller than about 0.8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the diameters of the first annular flange and the pot wall so that their ratio is smaller than about 0.8 dependent upon how the spring concertina/bellows would be attached to the spring pot. As long as the flange is designed to support the concertina/bellows, the specific ratio of the overall diameter of the spring pot to the diameter of the flange is merely a matter of design preference.

Regarding Claim 5, the '919 patent, as modified, does not disclose that the sheet bar is surface-treated.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the sheet bar of the '919 patent, as modified, to be surface-treated in order to prevent corrosion of the spring pot within its operating

environment. Surface treating the metal in which the spring pot is formed would prolong the overall life of the spring pot by giving it better overall protection from the elements in which it is intended to be used in.

Regarding Claim 6, see Claim 1 above.

Regarding Claim 7, the '919 patent, as modified, does not disclose that 1) the pot wall is deep drawn from the sheet bar or 2) that the bottom is formed from a middle region of the sheet bar.

Regarding the pot wall being deep drawn, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the pot wall of the '919 patent, as modified, to be formed from the sheet bar by deep drawing, again, as a matter of design preference dependent upon the manufacturing constraints of the pot, production costs, type of material used, etc. See also U.S. Patent No. 5,060,916 to Koschinat et al which discloses deep drawing of a sheet metal to form a spring pot (column 6 lines 33-35).

Regarding the bottom being formed from a middle region of the sheet bar, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the bottom of the spring pot of the '919 patent, as modified, from a middle region of the sheet bar as a matter of design preference dependent upon the amount of material available and capable of use in constructing such a spring pot configuration. As long as the bottom portion of the pot can be formed from the sheet bar, the location of its formation on the sheet bar is arbitrary.

Regarding Claim 8, see Claims 1 and 3 above.

Regarding Claim 9, the '919 patent, as modified, discloses that the second annular flange is integrally formed on the bottom, together with the forming of the pot wall by means of a sheet metal forming process (as described in the rejection of Claim 1 above).

However, the '919 patent, as modified, does not disclose that the second annular flange is formed starting from an orifice in a middle region of the sheet bar.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the second annular flange of the spring pot of the '919 patent, as modified, from an orifice in a middle region of the sheet bar as a matter of design preference dependent upon the amount of material available and capable of use in constructing such a spring pot configuration. As long as the second annular flange portion of the pot can be formed from the sheet bar, the location of its formation on the sheet bar is arbitrary.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

PB Pub No. 2004/0222577 to Moritz et al and Wenzel et al both disclose spring pot assemblies made from one piece of sheet metal.

Koschinat et al and Smith both disclose spring pot assemblies formed from deep drawn sheet metal.


Leek discloses a method of forming an apparatus out of sheet metal.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pam Rodriguez whose telephone number is 571-272-7122. The examiner can normally be reached on Mondays 5:30 AM -4 PM and Tuesdays 5 AM -11 AM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Pam Rodriguez
Primary Examiner
Art Unit 3683
5/16/06

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